

# PETROL(GASOLINE) DOHC MPI ENGINE <sup>1</sup>/<sub>2</sub> CUTAWAY EDUCATIONAL MODEL



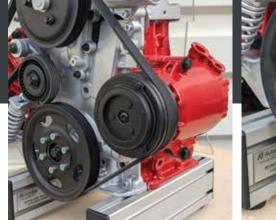


Petrol(gasoline) DOHC MPI Engine ½ Cutaway Educational Trainer is a highly detailed and precise training model designed to facilitate comprehensive learning of internal combustion engine mechanics. It is an essential tool for technical education, allowing students to gain in-depth understanding of dual overhead camshaft (DOHC) technology, timing chain replacement, and other critical engine functions. This model replicates the key components of a petrol (gasoline) engine with precision, making it an invaluable resource for automotive training environments.



### Features

- Includes visible camshafts, valves, valve lifters, and timing chain with tensioners for comprehensive DOHC study.
- Exposes key internal components including the engine block, pistons with rings, crankshaft, connecting rods, and combustion chamber for detailed analysis.
- Features an alternator belt with tensioner and a timing chain with sprockets and tensioners, enabling demonstration of replacement procedures.
- Allows controlled rotation of the crankshaft to demonstrate DOHC operation, with necessary lubrication of moving parts.









#### Value for instructors

- Utilize a fully functional, sectioned engine model that accurately represents the key elements of a DOHC petrol(gasoline) engine. This facilitates clear and effective teaching of complex engine mechanics and timing procedures.
- Provides easy, safe, and comfortable training that builds confidence, using OEM components to offer a realistic truck repair experience.
- The model is designed with protective plastic covers over the cutaway sections, ensuring student safety during demonstrations. Its robust construction guarantees longevity, even with regular classroom use.
- The trainer's minimal weight and dimensions allow for easy transport and storage, enabling versatile use across various training environments. It can be conveniently placed on a workbench or tool trolley.
- Instructors can guide students through practical exercises such as torque measurements and component replacements, using the model to simulate real-world engine maintenance tasks.
- Training stand is designed for simplicity, requiring only small adjustments to reset to default parameters, making it easy to prepare and start each lesson quickly and efficiently.

#### Value for students

- Gain hands-on experience with dual overhead camshaft (DOHC) technology, including the examination of 4-valve per cylinder configuration, and the operation of camshafts, valves, and valve lifters.
- Learn the intricacies of piston movement, combustion chamber dynamics, and the role of intake and exhaust ports. Detailed study of the sectioned engine block, crankshaft, connecting rod, and pistons with rings provides a clear understanding of engine internals.
- Perform timing chain and auxiliary drive belt replacement training, enhancing practical skills in engine maintenance. The model includes visible components such as the timing chain with camshaft sprocket, tensioners, and the alternator belt with tensioner.
- Rotate the crankshaft to observe the operation of the DOHC mechanism, allowing students to visualize the synchronization of engine components. Note that rotation is for demonstration purposes and requires lubrication of rotating parts.

## Specifications

- Dimensions: 750 x 670 x 440 mm (29.53 in x 26.38 in x 17.32 in)
- Weight: approx. 81 kg (178 lb)
- Safety Features: Protected by plastic covers on sectioned areas
- Product number: IVDB02



